

1	PROCESSES	34	..By means to vary engagement of
2	.Involving registration of		feed means with material
	material	35	...Feed means moved out of
3	..Involving lateral registration		engaging position
4	.Involving plural feeding means	36	..By ancillary feed means
5	.Involving stripping from	37	..By disconnectable connection in
	conveyer		drive train
6	.By engaging material	38	..By means to retard material
	modifications		movement
7	.By fluid current	39	...By material contact
8	.Intermittently or interruptedly	40	..By variable-ratio transmission
9	CONTROL MEANS RESPONSIVE TO	41	...Coaxially shiftable pulley
	INDICIA CARRIED BY AUXILIARY		cones
	RECORD (E.G., TAPE OR CARD)	42	..By variable speed power source
10	WITH MATERIAL-RESPONSIVE CONTROL	43	...To stop and/or start movement
	MEANS		of material
11	.Responsive to break or depletion	44	..Responsive to dancer detector
12	.For threading device	45	.Detector means
13	.For flywheel	46	WITH INTERLOCK MEANS
14	.For festooner	47	.And means to initiate operation
15	.To position material laterally		of part
16	..With control of longitudinal	48	WITH RANDOMLY ACTUATED STOPPING
	movement		MEANS
17	..By roller pair engaging web	49	SELECTIVELY REVERSIBLE MATERIAL
	margin		MOVER
18	..By shiftable material support	50	.By optional moving means
19	...Laterally movable support	51	.By optional drive trains
20	....Responsive to photocell	52	MEANS TO ENGAGE LONGITUDINALLY
	detection		SPACED MODIFICATIONS IN
21	...Pivotally mounted roller		MATERIAL
22	....Responsive to pneumatic	53	.Such means produces the
	detection		modifications
23	....Responsive to material-	54	.Alternately selectable prongs
	contacting element	55	.Prong operable intermittently to
24	.To regulate longitudinal		prevent longitudinal material
	movement of material		movement (e.g., registration
25	..Responsive to overload		pins)
26	..Responsive to weight of	56	..With means to disable
	accumulation		restraining operation of prong
27	..Registration	57	..With positive actuator to
28	...Of continuously moving		project and to retract prong
	material	58	..With resilient means to urge
29	....By means to vary speed of		prong toward material
	material momentarily	59	.With additional means to
30	.....By means to vary speed of		restrict material movement
	feed roll	60	..Fluctuation damping means
31	.....By ancillary power source	61	...By flywheel
32	...By means to change feeding	62	.Reciprocating or oscillating
	movement of intermittent feed		claw or finger
	stroke	63	..Serial sequentially operated
33	...By means to discontinue		claws
	movement of material	64	..With means to change path or
			extent of claw movement

65	...Range changer	97.4	.Vacuum jet for strand
66	....To stop material movement	100	WITH ALARM, SIGNAL, OR INDICATOR
67	..On longitudinally reciprocated carrier	101	CONVERTIBLE
68	...Claw pivotable on carrier	102	COMBINED
69	..On two rotated carriers	104	BY FESTOONER
70	..On carrier pivoted about a fixed axis	105	.With means to shift girt with respect to festoon and conveyer
71	...Claw pivotable on carrier	106	.With means to hold material on girt
72	...Claw radially slidable on carrier	107	.With means to feed girt to conveyer
73	..Claw slides on and pivots about fixed stud	108	PLURAL MATERIAL-MOVING MEANS
74	.Pins on flexible belt or chain	109	.With plural paths for material
75	..With means to effect supplementary pin movement	110	..Alternately usable
76	.Rotating sprocket (e.g., pin-wheel)	111	.With means to independently vary mover speed
77	..For concatenated material	112	.Continuous feed from serial sequentially operated feeders
78	..Circumferentially opposite pins engage looped material	113	.With bight former
79	..With laterally adjustable sprocket(s)	114	..With pivotal former-support
80	..With means to disengage material from prong(s)	115	.With intermittent material-mover
81	...By supplementary movement of prong(s)	116	..Including auxiliary material-mover for starting
82	..With means to retain material on prong(s)	117	..And continuous material-mover
83	...Retainer and sprocket relatively displaceable	118.1	.And intermediate storage
84	....Roller retainer	118.2	..In a loop having a displaceable support
85	..Roller retainer	118.3	...Where support is upheld by the material (e.g., dancer roller, etc.)
86	..With additional means to support material	118.4	..In a container
87	.Including detail of prong shape or construction	118.5	...Having conveying means within
88	WITH MEANS TO TEMPORARILY DEFORM MATERIAL Laterally (E.G., FOR STIFFENING)	120	BY INTERMITTENT (INTERRUPTED) MATERIAL-MOVER
89	SHIFTABLE PART ALLOWING HAND LOADING	121	.Stored material-movement-derived energy provides moving force
90	.With shiftable roller	122	.With means varying the material speed during movement
91	THREADING DEVICE	123	.Cyclical unequal movements
92	.With means to pull lead-end	124	.Comprising constantly rotated roll on reciprocating or oscillating carrier
93	WITH ADHERENCE OR ATTRACTION OF MATERIAL TO ADVANCING MEANS	125	.Including material abutment
94	.By electrostatic force	126	..Movable with material
95	.By pneumatic pressure	127	.Manual material-mover (e.g., dispenser)
96	.By adhesive nature of material	128	..With means to clamp material during dwell
97.1	BY FLUID CURRENT	129	..With means to limit increment of advance
97.2	.And web storage	130	...With means to disable operation of limit means
97.3	.Floating web		

131	....Time-controlled	167	..With spring-biased grip element
132	...Plural selectable limit means	168	BY ORBITALLY TRAVELING MATERIAL- ENGAGING SURFACE(S)
133	...With means to adjust limit means	169	..With start-facilitating means
134	..Unicyclic mover	170	..On endless belt or chain
135	..Plural means to select increments of advance	171	..With cooperating surface
136	..With means to adjust increment	172	...Comprising endless belt or chain
137	..Adjustable feeder	173	..With gripper(s) mounted thereon
138	..Operative-controlled, machine-powered adjustment	174	..With control or adjustment means
139	..Adjustable feed increment	175	..To vary diameter of roll
140	...By means to vary material-engagement of recessed roll	176	..To vary bite of contacting pinch members
141	...By means to change length of feeder travel	177	...Infinitesimally variable
142	....Comprising variable-throw crank	178	..To vary speed of material-advancer
143	..With means to effect feed and retrograde movement	179	..For shifting roll(s) axially
144	..With overtravel preventer	180	..For shifting roll(s) angularly
145	..Intermittently acting	181	..Comprising rotary pinch pair
146	..And retrograde movement preventer	182	..Including radial material-engaging surface
147	..With retrograde movement preventer	183	..Including means to ensure arcuate engagement
148	..Unidirectionally rotating roll	184	..Tapered roll or bite
149	..Positively actuated to grip	185	..Including equal-diameter coaxial rolls
150	...By hydraulic or electrical means	186	..Yieldable bite
151	..Yieldingly biased	187	...Roll axis resiliently urged
152	..Comprising material-moving roll	188	..With drive means
153	..Recessed roll	189	..Plural spaced apart rolls (e.g., guide rolls)
154	..With means to disengage roll from material	190	..Including details of roll or mount
155	...Continuously rotating roll	191	..Roll surface radially movable
156	..Unidirectional	192	...And axially movable (e.g., centering rolls)
157	...Ratcheted roll	193	..Irregular friction surface (e.g., roughened)
158	..Comprising reciprocating or oscillating material-mover	194	..Bearing or support
159	..With means to retard movement of advancer carrier	195	WITH MEANS TO RETARD MATERIAL MOVEMENT (E.G., "TENSIONER")
160	..On pivoted carrier	196.1	PASSIVE GUIDE
161	..With means to disable material-mover	200	MISCELLANEOUS
162	..With means to move grip element into material engagement		
163	...Comprising link positively connected to element		
164	....Which link effects material-advancing movement		
165	...Comprising camlike surface		
166Which surface effects material-advancing movement		

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